



January 1992

Copyright Protection for Purely Factual Compilations Under *Feist Publications, Inc. v. Rural Telephone Service Co.*: How Does *Feist* Protect Electronic Data Bases of Facts?

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**COPYRIGHT PROTECTION FOR PURELY FACTUAL
COMPILATIONS UNDER *FEIST PUBLICATIONS,
INC. V. RURAL TELEPHONE SERVICE CO.*:
HOW DOES *FEIST* PROTECT
ELECTRONIC DATA BASES OF FACTS?**

by Gerard J. Lewis, Jr.[†]

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I. INTRODUCTION	

Factual works, because of their very nature, provide a unique illustration of the tensions underlying the policy of copyright law, which seeks to maintain incentives for authors to create new works balanced against the public interest in the dissemination of these works for widespread public access.¹ Perhaps no work captures this tension better than the purely factual compilation. Telephone directories, restaurant guides, rental property lists, and data bases of stock quotations are immensely useful and society benefits from their creation by various compilers. However, because the individual facts contained within these compilations are not protected by copyright law, subsequent compilers have often used the facts in their predecessors' works to produce competing factual works. Although society may benefit from the larger number of compilations at its disposal, original compilers argue that their incentive to produce factual works is undermined if later compilers can freely copy facts from original compilations. To address this tension between incentive and free access to facts, courts have applied a vari-

1. Robert C. Denicola, *Copyright in Collections of Facts: A Theory for the Protection of Nonfiction Literary Works*, 81 COLUM. L. REV. 516, 519 (1981) [hereinafter Denicola]; Robert Gorman, *Fact or Fancy? The Implications for Copyright*, 29 J. COPYRIGHT SOC'Y 650, 650-63 (1982) [hereinafter Gorman].

ety of copyright theories that largely favor the commercial investment and interests of original compilers.

Not surprisingly, the compilation theories applied by courts have varied from circuit to circuit. Some courts have granted copyright protection based on the physical arrangement of a compilation while others have grounded protection in the original compiler's investment of time and money in producing his compilation. On March 27, 1991 the United States Supreme Court clarified the standard for copyright protection in purely factual compilations with its decision in *Feist Publications, Inc. v. Rural Telephone Service Co.*² The 9-0 decision in *Feist* — a case over alleged copyright infringement in telephone directory white pages — established arrangement and selection of information as the proper tests for copyright in compilations. In making its decision, the Court rejected a popular compilation theory which focused on the labor of the compiler.

Feist is important because it clarifies the compilation theories and reiterates the traditionally low standard of originality required for copyright protection. It is also significant because its reasoning has important consequences for publishers of the quintessential modern factual work: the electronic data base.³ Electronic data bases of facts pose unique problems for the compilation theories because of their inherent flexibility and the ease with which they can be accessed. The character and uses of data bases underscore the need for a compilation theory that meets the incentive and dissemination goals of copyright law while recognizing the need for reasonable commercial and noncommercial access to the facts contained in data bases. This access is especially important because many data bases are the sole source of certain kinds of factual information and because the largest users of data bases are often data base publishers themselves.

This Comment contends that the selection theory of compilations as defined by *Feist* is the best theory for assessing whether an electronic data base of factual information is protected by copyright. The selection theory's focus on the judgment and discretion of a compiler in designing his compilation mirrors the process of designing and compiling an electronic data base. Because the

2. 111 S. Ct. 1282 (1991) (Blackmun, J., concurring).

3. For example, data bases containing financial, credit reporting, demographic, bibliographic, economic, and industrial information are typical data bases which could be affected by *Feist*. Brief of the Information Industry Association and ADAPSO, the Computer Services Industry Association, Inc. as *Amicus Curiae* in Support of Neither Party at 7-9, *Feist Publications, Inc. v. Rural Tel. Serv. Co.*, 111 S. Ct. 1282 (1991) (No. 89-1909) [hereinafter IIA/ADAPSO Brief].

Supreme Court set a very low originality standard, data bases which reflect more than the most obvious and basic information are likely to be protected under the selection theory of *Feist*. Most importantly, the selection theory provides copyright protection to compilers of factual works without extending protection to uncopyrightable facts. This maintains the compiler's incentive to produce these works, while preserving the public interest in widespread access to factual information.

In Part II, this Comment describes factual compilations and the interests of both users and developers in these works.

Part III summarizes the general foundations of copyright law, the types of factual works protected historically, and the basic statements of modern compilation law.

Part IV of this Comment examines the three primary theories of compilation law as illustrated by the *Feist* case. This Part illustrates and analyzes compilation law using statutory and case law sources, law review commentaries, and three complementary sources from *Feist*: the Supreme Court briefs filed by the parties and one *amicus curiae* brief, the transcript of the oral arguments before the Court, and the Court's *Feist* opinion.

Finally, Part V of this Comment illustrates the nature of an electronic data base of factual information and describes the process of creating a data base. The analysis applies the compilation theories argued in, and clarified by, the *Feist* case to electronic data bases. Although each compilation theory has some applicability to electronic data bases, this Part demonstrates that the selection theory provides the best mechanism for determining whether a data base is protectable as a compilation under copyright law.

II. THE NATURE OF COMPILATIONS OF FACTS AND THE INTERESTS OF DEVELOPERS AND USERS OF FACTUAL WORKS

A. *Creating a Compilation of Facts*

Printed compilations of facts are developed in a manner similar to electronic data bases of facts. In *Feist*, the *amicus curiae* brief filed by the trade associations whose members generate, distribute, and transmit electronic compilations describes the basic steps the developer of a copyrightable data base follows.⁴ First, the developer identifies a market for the compilation and assesses the needs, capabilities, and preferences of the user. Next, the developer locates the

4. *Id.* at 2.

sources of information for the compilation. Frequently, there are many sources, each of which the developer must examine to identify the facts needed for his data base. Finally, once the developer arranges for access to all of the sources of information, typically through licenses, he then edits and presents the information in the data base in a manner which maximizes its clarity and usefulness.⁵

B. *The Interests of Developers and Users of Compilations of Facts*

Compilations, especially electronic data bases, are big business today.⁶ Because compilations require enormous investments of money, time, and labor, the developers of compilations argue that strong copyright protection is necessary to encourage development of the information service industry. This argument is consistent with the economic underpinnings of copyright law.⁷ However, these same developers recognize the need for reasonable access to compilations in order to develop new compilations and services.⁸ This is consistent with the public access aspect of copyright law.⁹ Commercial access to compilations is important because the developers of compilations are also their largest users. Typically, access to compilations, especially electronic data bases, is governed by licenses. Yet licenses are becoming less effective given the expansion of communications access to electronic data bases and the popularity of "stand alone" sources such as compact disks.¹⁰ Thus, there is an added burden placed on copyright law to resolve the tension between strong protection for developers of compilations and reasonable access to compilations.

5. *Id.* at 18-19. The process of creating a data base is described later in this Comment. See *infra* text accompanying notes 155-158.

6. *Id.* at 18. A government study estimated that revenues of the electronic information service industry alone were \$9 billion in 1990. *Id.* at 21 n.17 (citing U.S. DEP'T OF COMMERCE, 1990 INDUSTRIAL OUTLOOK (1990)).

7. "The economic philosophy behind the clause empowering Congress to grant . . . copyrights is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors." *Mazer v. Stein*, 347 U.S. 201, 219 (1954).

8. IIA/ADAPSO Brief, *supra* note 3, at 2, 18.

9. Civil copyright law is a compromise between competing social policies — one favoring the widest possible dissemination of new ideas and new forms of expression, and the other giving writers and artists enough of a monopoly over their works to ensure their receipt of fair material rewards for their efforts. The first policy predominates, which means that the system of rewards is to be no more extensive than is necessary in the long run to elicit a socially optional [sic] [optimal] amount of creative activity.

United States v. Bily, 406 F. Supp. 726, 730 (E.D. Pa. 1975) (footnote omitted).

10. IIA/ADAPSO Brief, *supra* note 3, at 21.

Private, noncommercial users of electronic data bases have a strong interest in reasonable access to data bases in the same way that a person who searches through a printed telephone directory does. Neither the user of the data base nor the telephone directory should be subject to copyright infringement for copying facts such as a stock quote or telephone number. Developers of compilations also do not want to scare users away from their compilations with the threat of a copyright infringement suit.

III. COPYRIGHT PROTECTION FOR COMPILATIONS

Copyright law rests on a constitutional provision which grants to Congress the power "[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."¹¹ The Copyright Act of 1976¹² ("Copyright Act") is the most recent statutory codification of federal copyright law. The constitutional provision and the Copyright Act exhibit the basic tension between providing incentives to developers of new works balanced against the public interest in access to these works.¹³

Copyright protection subsists "in original works of authorship fixed in any tangible medium of expression . . . from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device."¹⁴ The threshold requirement for copyright protection, as defined by the case law and embodied in the Copyright Act, is originality.¹⁵ Two additional requirements are often subsumed under discussions of originality:

11. U.S. CONST. art. I, § 8, cl. 8.

12. 17 U.S.C. §§ 101-810 (1988).

13. "In attempting to fulfill its constitutional mandate . . . Congress has created a balance between the artist's right to control the work during the term of the copyright protection and the public's need for access to creative works." *Stewart v. Abend*, 110 S. Ct. 1750, 1754 (1990).

14. 17 U.S.C. § 102(a) (1988).

15. "The standard for originality is low." *Feist*, 111 S. Ct. at 1296. Originality implies that an author makes more than a "trivial variation" so as to create something that is recognizably his own. In this sense, originality means little more than a bar on copying. See *Alfred Bell & Co. v. Catalda Fine Arts, Inc.*, 191 F.2d 99, 103 (2d Cir. 1951). The Copyright Act adopted the standard for originality developed by the courts. The standard does not include any requirement of novelty, ingenuity, or aesthetic merit. H.R. REP. NO. 1476, 94th Cong., 2d Sess. 51 (1976), reprinted in 1976 U.S.C.A.N. 5659, 5664.

Closely related to originality is creativity. Creativity is often implicitly required when the subject matter of the copyright claim is extremely brief or is composed of factual information. Courts usually do not make qualitative judgments as to creativity, so it usually means nothing more than a work must show a minimum quantity, not quality, of authorship. Denicola, *supra* note 1, at 521-22. See also Jack B. Hicks, Note, *Copyright and Computer Databases: Is Traditional Compilation Law Adequate?*, 65 TEX. L. REV. 993, 998 (1987) [hereinafter Note].

authorship and fixation.¹⁶ The limitations on copyright protection¹⁷ and the standards for infringement¹⁸ are similarly defined by the case law and the Copyright Act.

The first copyright statute, passed in 1790, extended protection to maps, charts, and books.¹⁹ Compilations of facts have been protected by copyright throughout most of this century.²⁰ Because the subject matter of early copyright law was mostly informational or factual, until the mid-nineteenth century copyright protection defined authorship with respect to the labor expended in creating a

16. The early Supreme Court created a low standard for authorship by defining an author as one "to whom anything owes its origin; originator; maker . . ." *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 58 (1884) (citation omitted). The Court adopted this same standard in *Feist*. 111 S. Ct. at 1288.

Fixation is a technical requirement that determines when federal copyright protection attaches to a work. Fixation is the modern interpretation of the constitutional reference to "Writings." Denicola, *supra* note 1, at 521. However, "writings" now includes a variety of works such as literary, musical, dramatic, choreographic, pictorial, sculptural, and audiovisual works. 17 U.S.C. § 102(a) (1988). Prior to fixation, a work may be eligible for common law or state statutory protection under a trade secret or misappropriation analysis.

17. The Copyright Act limits protection so that no protection extends "to any idea, procedure, process, system, method of operation, concept, principle, or discovery." 17 U.S.C. § 102(b) (1988). This section of the Copyright Act codifies the common law rule that a copyright only protects the author's expression in her work, and does not extend to the idea embodied in the work. *See, e.g., Mazer v. Stein*, 347 U.S. 201, 217 (1954) ("[A] copyright gives no exclusive right to the art disclosed; protection is given only to the expression of the idea — not the idea itself.") (footnote omitted); *see also Whelan Assoc., Inc. v. Jaslow Dental Lab., Inc.*, 797 F.2d 1222, 1234 (3d Cir. 1986), *cert. denied*, 479 U.S. 1031 (1987) ("It is axiomatic that copyright does not protect ideas, but only expressions of ideas."). By limiting the scope of copyright protection to the expression of an author, the underlying idea of the work is free to be copied and improved upon by subsequent authors.

Copyright protection also does not extend to facts. *See infra* text accompanying note 41.

18. Copyright infringement occurs when one or more of an author's exclusive rights is violated. The exclusive rights permit an author to make and distribute copies of her work, prepare derivative works, and, if appropriate, perform and display her work. 17 U.S.C. § 106 (1988). The most common type of infringement is copying. "Absent copying there can be no infringement of copyright." *Mazer v. Stein*, 347 U.S. 201, 218 (1954) (footnote omitted). Copying may be inferred if a potentially infringing copy is substantially similar to the copied work and access to the copied work by the defendant is proven. *Arnstein v. Porter*, 154 F.2d 464, 468 (2d Cir. 1946).

Copying which exceeds the level of substantial similarity may be permitted by the fair use doctrine, which permits reasonable, fair uses of another's work without authorization if the policies of the copyright system would be furthered by the use. Denicola, *supra* note 1, at 524; 17 U.S.C. § 107 (1988).

19. Leo J. Raskind, *The Continuing Process of Refining and Adapting Copyright Principles*, 14 COLUM.-V.L.A. J.L. & ARTS 125, 129 (1990) (citing the Act of May 31, 1790, Ch. 15, 1 Stat. 24). *See also* Jane C. Ginsburg, *Creation and Commercial Value: Copyright Protection of Works of Information*, 90 COLUM. L. REV. 1865, 1873 n.29 (1990) [hereinafter Ginsburg].

20. Denicola, *supra* note 1, at 527 n.55 (citing the Copyright Act of 1909, Act of March 4, 1909, ch. 320, § 5(a), 35 Stat. 1076 (1909)).

work and not with respect to the author's personal expression.²¹ Later, in the mid- to late-nineteenth century the increase in literary works refocused copyright on the author's personality and individuality.²² The scope of early copyright protection for factual works appears to have been very "thin" in that it protected only the precise work of the first author and no more.²³

Under the Copyright Act, a compilation is the result of the gathering together of information from assorted sources. The Copyright Act defines a compilation as a "work formed by the collection and assembling of preexisting materials or of data that are selected, coordinated, or arranged in such a way that the resulting work as a whole constitutes an original work of authorship."²⁴ The Copyright Act expressly extends the subject matter of copyright to compilations.²⁵ Finally, the Copyright Act limits the scope of protection in a compilation "to the material contributed by the author of such work, as distinguished from the preexisting material employed in the work, and does not imply any exclusive right in the preexisting material."²⁶ This final caveat restricts copyright protection solely to the original material contributed by the author or compiler. It leaves the scope of copyright protection in any preexisting material right where the compiler found it. This restriction highlights a key problem of compilation theory: defining the protectable expression, if any, in a highly factual compilation.

IV. THE SUPREME COURT'S COMPILATION ANALYSIS IN *FEIST PUBLICATIONS, INC. V. RURAL TELEPHONE SERVICE CO.*

This section of the Comment initially describes the facts of the *Feist* case and its disposition by the lower courts. The remainder of this section illustrates the basic concepts of compilation law as argued in *Feist* and examines the three primary doctrines of copyright protection for compilations as argued by the parties in *Feist* and analyzed by the Supreme Court.

21. See Ginsburg, *supra* note 19, at 1874-81.

22. See *id.* at 1874, 1881-88.

23. *Id.* at 1878.

24. 17 U.S.C. § 101 (1988).

25. "The subject matter of copyright as specified by section 102 includes compilations" 17 U.S.C. § 103(a) (1988).

26. 17 U.S.C. § 103(b) (1988).

A. *The End of Copyright in Telephone Directory White Pages*

1. The Facts of *Feist*

Rural Telephone is a Kansas corporation that provides telephone service to subscribers in northwest Kansas. As part of its telephone service, Rural compiles, publishes, and distributes telephone directories that list the telephone numbers for the geographical area in which Rural provides service. Rural's telephone directories consist of white pages that list subscribers' names, addresses, and telephone numbers alphabetically and yellow pages that list Rural's business subscribers alphabetically and also contain classified advertising.²⁷ The 1982-1983 telephone directory at issue in *Feist* was marked with an appropriate notice identifying Rural as the copyright holder.²⁸

Feist Publications is an independent publisher of telephone directories which cover the geographical area served by Rural as well as additional areas served by other telephone companies.²⁹ Feist entered into license agreements with the telephone companies serving the areas covered by its directory. Under these agreements, the telephone companies provided Feist with a list of their respective white pages listings. Of the telephone companies in these areas, only Rural refused to license its white pages listings to Feist. Because Feist could not license Rural's listings, in 1978 Feist took Rural's printed telephone directory and removed the listings it could not use and retained the remainder of the listings. Feist then sorted the listings by town and sent them to verifiers whose job it was to call the number in each listing to verify its correctness. The corrected lists were returned to Feist who incorporated them into its directory.³⁰

From 1979 through 1982, Feist continued to publish its directory making limited use of Rural's telephone white pages. In 1983, Feist again made full use of the Rural white pages as it had in 1978, including the use of verifiers. However, Rural, who had been suspicious of Feist's activities, had inserted fictitious listings in its own 1982-1983 telephone directory. Four of these fictitious listings slipped past Feist's verifiers and appeared in Feist's 1983

27. *Feist*, 111 S. Ct. at 1286.

28. *Rural Tel. Serv. Co. v. Feist Publications, Inc.*, 663 F. Supp. 214, 216 (D. Kan. 1987), *aff'd*, 916 F.2d 718 (10th Cir. 1990) (unpublished opinion), *rev'd*, 111 S. Ct. 1282 (1991).

29. *Feist*, 111 S. Ct. at 1286.

30. *Rural Tel. Serv. Co. v. Feist Publications, Inc.*, 663 F. Supp. at 217.

directory.³¹

2. The *Feist* Decisions

Rural sued Feist for copyright infringement claiming that Feist could not use Rural's white pages listings as a source for Feist's directory.³² Rural argued that Feist must independently canvass or survey the telephone subscribers whose names and numbers Feist wanted to include in its directory. Feist responded that an independent canvass was economically unfeasible and unnecessary because the information in Rural's white pages was not protected by copyright.³³

The District Court for the District of Kansas granted summary judgment to Rural because a series of cases indicated that telephone directories are the proper subject matter of copyright. The court thus found that the white pages of a telephone directory were an original work of authorship. From this conclusion, and without further discussion or analysis, the court then held that Rural had demonstrated a valid copyright for its 1982-1983 directory.³⁴ The court did not explain how the fact that a telephone directory is the proper subject matter of copyright automatically implied that Rural owned a valid copyright in its directory.

The district court found that Feist copied Rural's white pages through direct evidence: the copying of the fictitious listings from the Rural directory which appeared in Feist's 1983 directory. The court rejected Feist's substantial similarity and *de minimis* copying

31. *Id.* In its Supreme Court brief, Feist emphasized that Rural had inserted 28 fictitious listings in the three directories beginning with the year 1980. None of these bogus listings were included in Feist's directories for the corresponding years. Feist did admit that four fictitious listings were "accidentally included" in its 1983 directory. Brief for Petitioner at 10, *Feist Publications, Inc. v. Rural Tel. Serv. Co.*, 111 S. Ct. 1282 (1991) (No. 89-1909) [hereinafter *Feist Brief*]. The 1983 Feist directory contained 46,878 alphabetized white pages listings. Approximately 4,000 listings from the corresponding Rural directory appeared in the Feist directory. Brief for Respondent at 3, *Feist Publications, Inc. v. Rural Tel. Serv. Co.*, 111 S. Ct. 1282 (1991) (No. 89-1909) [hereinafter *Rural Brief*]. 1,309 of these listings in Feist's 1983 white pages were identical to listings in Rural's 1982-1983 white pages. *Feist*, 111 S. Ct. at 1286.

32. Feist did not dispute that yellow pages, which typically include advertising, instructions for using your telephone, and the like, are copyrightable. "This case involves *only* the white pages listings . . . nothing more." Reply Brief for Petitioner at 2, *Feist Publications, Inc. v. Rural Tel. Serv. Co.*, 111 S. Ct. 1282 (1991) (No. 89-1909) [hereinafter *Feist Reply Brief*]. See also Official Transcript at 21-23, *Feist Publications, Inc. v. Rural Tel. Serv. Co.*, No. 89-1909 (argued Jan. 9, 1991) [hereinafter *Transcript*] (available from Alderson Reporting Co., 1111 14th Street, N.W., Washington, D.C. 20005-5650; 1-800-FOR-DEPO).

33. *Feist*, 111 S. Ct. at 1287.

34. *Rural Tel. Serv. Co. v. Feist Publications, Inc.*, 663 F. Supp. 214 at 218.

defenses.³⁵ In its infringement analysis, the court accepted Rural's argument that Feist was compelled to make an independent canvass to secure the listings for its white pages directory.³⁶ The court rejected Feist's argument that by re-arranging the information from Rural's white pages Feist had escaped copyright infringement.³⁷ The Court of Appeals for the Tenth Circuit affirmed the district court in an unpublished opinion which echoed the district court's reasoning.³⁸ On March 27, 1991 the United States Supreme Court reversed the two lower courts and found in Feist's favor by a unanimous vote.³⁹

B. *Copyright Protection Does Not Extend to Individual Facts*

The names, addresses, and telephone numbers in the white pages listings at issue in *Feist* could not provide a clearer, more intuitive example of why individual facts should not be protected by copyright law. These facts owe their existence to no one: they are the mere result of being given a name, moving into a particular location, and being assigned a telephone number. Were copyright to grant protection to the first person who noticed the results of particular events, common information such as the day's temperature, the height of a well-known building, and the score of the local baseball team's last game would be freely-exchanged only under threat of copyright infringement. Such a scenario certainly does not advance the constitutional mandate to promote the progress of the arts and sciences.⁴⁰

The policy that denies protection of individual facts supports the copyright goal of promoting the progress of the arts and sciences because it permits subsequent authors to build upon the work of their predecessors by using unprotected facts to create new works.⁴¹ If copyright extended to individual facts, the command to promote the sciences and arts would be compromised because of the

35. *Id.* at 218-19.

36. *Id.* at 219. "The uncontroverted evidence before the court reveals that [Feist] extensively used [Rural's] directory without first conducting an independent canvass. Thus, even though [Feist] later verified the material, [Feist] clearly infringed [Rural's] copyright." *Id.*

37. "The fact that [Feist] may have reorganized the material it gained from [Rural] or may have added other material does not preclude a finding of infringement." *Id.* at 218.

38. *Rural Tel. Serv. Co. v. Feist Publications, Inc.*, 916 F.2d 718 (10th Cir. 1990) (opinion printed at 40 PAT. TRADEMARK & COPYRIGHT J. 503, 504 (1990)), *rev'd*, 111 S. Ct. 1282 (1991).

39. *Feist Publications, Inc. v. Rural Tel. Serv. Co.*, 111 S. Ct. 1282 (1991) (Blackmun, J., concurring).

40. See *supra* text accompanying note 11.

41. Denicola, *supra* note 1, at 525.

increased costs to each author for procuring the factual building blocks for his new work. In short, it would be less attractive for later authors to create new works that build upon existing works.

On a technical level, copyright law does not protect individual facts because they fail to meet the statutory requirement of originality.⁴² Facts are simply discoveries which do not owe their origin to any author.⁴³ The Copyright Act follows this distinction and excludes individual facts from protection by classifying them as discoveries.⁴⁴ A Copyright Office regulation indicates that public domain information, among other things, does not qualify for copyright protection.⁴⁵

Both the Petitioner and Respondent in *Feist* agreed that individual facts were not protectable under copyright law⁴⁶ and the

42. See *supra* note 15 and accompanying text. In a non-legal sense, facts are commonly thought of as objectively real things or events whose existence can be verified. A dictionary definition of "fact" reads: "1. Something put forth as objectively real. 2. Something objectively verified. 3. a. Something with real, demonstrable existence. . . . b. The quality of being real or actual. 4. Something carried out or performed." WEBSTER'S II NEW RIVERSIDE UNIVERSITY DICTIONARY 460 (Trade ed. 1984).

43. "Thus, since facts do not owe their origin to any individual, they may not be copyrighted and are part of the public domain available to every person." *Miller v. Universal City Studios, Inc.*, 650 F.2d 1365, 1369 (5th Cir. 1981). But cf. Ginsburg, *supra* note 19, at 1912-16. Professor Ginsburg argues that the fact-expression distinction may not be fundamental to copyright doctrine. She posits that facts in "high authorship" works like historical novels should be protected only to the extent of the author's subjective contributions. This would leave the facts available for subsequent authors while leaving a substantial amount of protectable material for the original author. By contrast, Professor Ginsburg argues that facts in "low authorship" works like telephone directories should be protected by copyright lest the incentive to create these types of work be undermined by simply copying facts from an earlier compiler's directory, for example. Professor Ginsburg does recognize, however, the possibilities for a monopoly in facts under her approach and she frames the solution as a balance between securing the commercial value of low authorship works while promoting the creation of informational works in general. *Id.* at 1916.

44. 17 U.S.C. § 102(b). The first person to find a fact has not created the fact but has merely discovered it.

45. These are examples of works not subject to copyright: "Works consisting entirely of information that is common property containing no original authorship, such as, for example: Standard calendars, height and weight charts, tape measures and rulers, schedules of sporting events, and lists or tables taken from public documents or other common sources." 37 C.F.R. § 202.1(d) (1991).

In addition, short phrases in simple instructions do not qualify for copyright protection. 37 C.F.R. § 202.1(a). See, e.g., *E.H. Tate Co. v. Jiffy Enter.*, 16 F.R.D. 571, 572 (E.D. Pa. 1954) ("It seems to me that it is little short of absurd to apply the copyright law to the words 'Apply hook to wall' in a perfectly natural explanation on how to use an article."). Facts are analogous to unprotectable short phrases to the extent that both are building blocks for many works. Without free access to short phrases like "Apply hook to wall" later authors would be forced to create their own unique expression for simple, often trivial, ideas. (The results could be interesting, however: "Fasten clasp to vertical plasterboard?")

46. *Feist* Brief, *supra* note 31, at 15, 17-18; *Rural Brief*, *supra* note 31, at 24.

Supreme Court began its analysis from this basic premise.⁴⁷ The Court noted the "undeniable tension" between refusing copyright protection for individual facts and permitting protection for compilations of purely factual information.⁴⁸ Because copyright law offers no solace to an author who wishes to govern the individual facts he collects, his only incentive to produce factual works lies in the copyright protection offered to entire compilations of facts. As made clear by the Court in *Feist*, originality is the touchstone for copyright protection in a compilation.⁴⁹

C. *The Compilation Theories Argued and Applied in Feist*

The *Feist* case is about originality. The issue was whether purely factual information,⁵⁰ arranged in a standardized format, showed sufficient originality as a compilation to warrant copyright protection.⁵¹ The Supreme Court defined originality for factual compilations in terms of the statutory definition of Section 101: a compiler's selection and arrangement of information, if independently made with a minimal degree of creativity, is sufficiently original to invoke copyright protection.⁵²

Feist attacked Rural's copyright claim on these statutory grounds. *Feist* argued that Rural's purely factual white pages listings do not meet the Section 101 requirements for protection as a

47. *Feist*, 111 S. Ct. at 1287.

48. *Id.* at 1287.

49. "The sine qua non of copyright is originality. . . . Originality is a constitutional requirement." *Id.* at 1287-88.

50. This Comment assumes that facts are composed of words and numbers. Although it is possible to create a compilation of graphical information, this Comment does not consider the consequences of treating images as facts.

51. Under Section 103(b) of the Copyright Act, the *Feist* case can also be said to turn on the question of whether *Feist* copied unprotected preexisting facts or copied original material contributed by Rural to its white pages listings. See *Feist* Brief, *supra* note 31, at 18-22; *Feist* Reply Brief, *supra* note 32, at 9-10; Rural Brief, *supra* note 31, at 17-18; IIA/ADAPSO Brief, *supra* note 3, at 14. However, the originality of the individual listings in Rural's white pages was not an issue because the names, addresses, and telephone numbers alone did not qualify for copyright protection.

52. Factual compilations . . . may possess the requisite originality. The compilation author typically chooses which facts to include, in what order to place them, and how to arrange the collected data so that they may be used effectively by readers. These choices as to selection and arrangement, so long as they are made independently by the compiler and entail a minimal degree of creativity, are sufficiently original that Congress may protect such compilations through the copyright laws. . . . Thus, even a directory that contains absolutely no protectible [sic] written expression, only facts, meets the constitutional minimum for copyright protection if it features an original selection or arrangement.

Feist, 111 S. Ct. at 1289 (citations omitted).

compilation. Feist framed three requirements for copyright protection in compilations under the Copyright Act:

- (1) There must be the collection and assembling of data,
- (2) exhibiting sufficient selection, coordination, or arrangement of the data, and
- (3) that as a result of the selection, coordination, or arrangement the compilation "as a whole" constitutes an original work of authorship.⁵³

Under this standard, Feist concluded that Rural's white pages were not copyrightable. First, Feist argued that Rural's white pages exhibited no selection, coordination, or arrangement because Rural received the listings as a byproduct of providing telephone service. Further, Rural published *all* of its subscriber listings thereby eliminating any selection. Finally, Feist argued that the alphabetical arrangement of the listings in Rural's directory failed to satisfy the coordination or arrangement prong of Section 101.⁵⁴

Rural attempted to refute Feist's arguments by citing the very low standard for originality.⁵⁵ Rural then argued at length that directories have traditionally been copyrightable subject matter;⁵⁶ that the legislative history of the Copyright Act of 1976 indicates that Congress intended to adopt the low standard for originality developed prior to passage of the current Copyright Act;⁵⁷ and that courts have interpreted the Copyright Act to include directories as copyrightable subject matter.⁵⁸

Rural correctly noted that telephone directories have been and remain the proper subject matter of copyright. Feist, however, did not argue that telephone directories were uncopyrightable. Feist did argue that in order to qualify for copyright protection a telephone directory must meet the statutory requirements of Section 101.⁵⁹ Rural argued that its white pages met the statutory requirements of collection, selection, and arrangement such that their telephone directory constituted an original work of authorship.⁶⁰

In support of their arguments, both Feist and Rural appealed

53. Feist Brief, *supra* note 31, at 15. The Supreme Court adopted Feist's interpretation of § 101 almost verbatim. *Feist*, 111 S. Ct. at 1293.

54. Feist Brief, *supra* note 31, at 18.

55. Rural Brief, *supra* note 31, at 9-10. The Supreme Court did not dispute that "[t]he standard of originality is low," but noted that "it does exist." *Feist*, 111 S. Ct. at 1296.

56. Rural Brief, *supra* note 31, at 11-13.

57. *Id.* at 13-17.

58. *Id.* at 17-22.

59. Feist Reply Brief, *supra* note 32, at 4.

60. Rural Brief, *supra* note 31, at 17-18.

to the three then-existing theories of copyright protection for compilations developed under the case law: the arrangement theory, the labor or "sweat of the brow" theory, and the selection theory. Feist emphasized the arrangement theory.⁶¹ Rural emphasized the labor theory,⁶² and to a lesser degree, the selection theory.⁶³ The Supreme Court flatly rejected the labor theory as inconsistent with the originality standard set out by Congress.⁶⁴ Instead, the Court reiterated the statutory test of originality as shown by arrangement and selection.⁶⁵ The following sections of this Comment examine the arrangement, labor or "sweat of the brow," and selection theories as argued and applied in *Feist*.

1. The Arrangement Theory

Courts have often found that the *arrangement* of information in a compilation shows sufficient originality to invoke copyright protection. The arrangement refers to the actual physical grouping of the information in the required tangible medium of expression. The arrangement theory has roots in both the case law⁶⁶ and the Copyright Act.⁶⁷

The arrangement theory is important because in many cases the arrangement of information in a purely factual compilation is the only identifiable element of originality. However, the scope of protection under the arrangement theory is very limited: only the wholesale copying of a compilation's arrangement is likely to be considered an infringement. Otherwise, even minimal variations to

61. Feist Brief, *supra* note 31, at 21-22; Feist Reply Brief, *supra* note 32, at 8.

62. For example, Rural cited *Schroeder v. William Morrow Co.*, 566 F.2d 3, 5 (7th Cir. 1977) extensively. Rural Brief, *supra* note 31, at 19-20. The bulk of Rural's argument focused on the labor theory of compilations. *Id.* at 27-42.

63. Rural Brief, *supra* note 31, at 18.

64. "Without a doubt, the 'sweat of the brow' doctrine flouted basic copyright principles." *Feist*, 111 S. Ct. at 1292.

65. *Feist*, 111 S. Ct. at 1295.

66. "[A] telephone directory compilation whose components are comprised exclusively of information in the public domain can be protected by copyright law only as to the selection and arrangement of the compilation . . ." *Southern Bell Tel. & Tel. Co. v. Associated Tel. Directory Publishers*, 756 F.2d 801, 810 (11th Cir. 1985).

In a case where the defendant copied from and published an index to the plaintiff's own index, the court, applying a fair use analysis, held that the plaintiff would not likely succeed on the merits of its copyright infringement claim because the defendant had not copied the plaintiff's arrangement. "Defendants . . . neither have copied the correlated data along with the personal names nor seek to publish a virtually identical index which would be in direct competition with the Times Index. . . . Defendants rather extracted the names from the multivolume Times Index and compiled their own alphabetical listing." *New York Times, Co. v. Roxbury Data Interface, Inc.*, 434 F. Supp. 217, 222-23 (D.N.J. 1977).

67. See *supra* text accompanying note 24.

the arrangement of a copied compilation might not escape the infringement label.⁶⁸

a. The Arrangement Theory in Feist

For the white pages listings at issue in *Feist*, the arrangement theory at best provides copyright protection which prohibits only the exact duplication of the arrangement of the particular telephone listings. However, the highly standardized arrangement of telephone directories may preclude copyright protection altogether as there would appear to be no originality in duplicating the standard arrangement of a telephone directory.⁶⁹ This conclusion is probably restricted to compilations such as white pages listings which merely list, in alphabetical order, the names, addresses, and phone numbers of telephone subscribers. In *Feist*, the *amicus curiae* brief filed by the trade associations whose members produce electronic compilations noted these familiar characteristics of white pages.⁷⁰

Feist argued that the arrangement of its white pages differed significantly from *Rural's* arrangement, and that in any event an alphabetical listing is an unprotectable idea.⁷¹ *Rural* strongly criticized *Feist's* arrangement theory as permitting verbatim copying of a compilation if its arrangement were not original.⁷² This is the logical conclusion under the arrangement theory. Copyright protects only original works of authorship. However, *Rural* overstated the effect of the arrangement theory when it argued that *Feist's* approach would eliminate copyright protection for almanacs, diction-

68. Denicola, *supra* note 1, at 528.

69. This observation has been made in a copyright infringement suit over printed office leasing guides. The court concluded that the standardized arrangement of highly factual works precluded a finding of substantial similarity between the plaintiff's and defendant's guides. *Black's Guide, Inc. v. Mediamerica, Inc.*, No. C-90-0819, 1990 WL 169141, at *4-5, (N.D. Cal. Aug. 15, 1990). The court noted that factual works by their nature permit a narrow range of possible arrangements. With respect to the two leasing guides at issue, the court found that similarities between the guides such as stacked columns and common information such as building names and available rental space were "inevitable" and thus precluded a copyright infringement action. *Black's Guide*, 1990 WL 169141, at *5.

Rural dismissed *Black's Guide* as in conflict with prior decisions and inapplicable because it was not about telephone directories. *Rural Brief*, *supra* note 31, at 22 n.12. The Supreme Court in *Feist* adopted reasoning similar to *Black's Guide* but without citing to that case. See *Feist*, 111 S. Ct. at 1296-97.

70. The trade associations noted three common characteristics of white pages: (1) all white pages have the same type of contents organized in a nearly identical, alphabetized manner; (2) the local telephone company obtains the white pages listings as a byproduct of providing telephone service; and (3) the local telephone company is often required to publish a directory of all white pages listings. IIA/ADAPSO Brief, *supra* note 3, at 10-11.

71. *Feist Reply Brief*, *supra* note 32, at 8; *Feist Brief*, *supra* note 31, at 22.

72. *Rural Brief*, *supra* note 31, at 34.

aries, credit reports, and reference works of all kinds.⁷³ For example, almanacs rarely use an identical format and arrangement. What makes individual almanacs useful is how they arrange and present their respective information. To the extent that almanacs use different, original arrangements, they would be protected under the arrangement theory. Dictionaries, on the other hand, are more like white pages in that they must appear in a standard, alphabetized arrangement. Thus, under the arrangement theory a dictionary would be unprotectable. Yet dictionaries, like almanacs, credit reports, and other reference works, and unlike white pages listings, feature much copyrightable expression in their descriptions and explanations. This expression would be copyrightable regardless of the arrangement of the compilation.

The Supreme Court in *Feist* was unconvinced that Rural's white pages listings showed sufficient originality.⁷⁴ According to the Court, merely listing names and addresses in alphabetical order lacked any trace of creativity sufficient to make the arrangement of Rural's white pages original.⁷⁵ The highly standardized nature of the arrangement of white pages undermined Rural's originality claim to such a degree that no amount of argument could otherwise convince the Court. The Court noted "[g]iven that some works must fail, we cannot imagine a more likely candidate [than Rural's white pages]. Indeed, were we to hold that Rural's white pages pass

73. *Id.*

74. At oral argument, after Rural's counsel explained how Rural selected and alphabetized its listings, Justice Kennedy remarked that "I'm not stunned by the originality so far." Transcript, *supra* note 32, at 34. Ironically, Rural's counsel then proceeded to define originality in terms of the arrangement theory. "What makes [compilations] original is how the author arranges that information . . ." *Id.* at 35. Rural's counsel returned to his standard argument against the arrangement theory shortly afterwards, however. *Id.* at 48.

Justice Stevens also addressed the standardized format of a telephone directory. He noted that a telephone directory must be published alphabetically, otherwise it would fail to serve the needs of most people. *Id.* at 45. Justice Souter questioned the arrangement theory on a more fundamental ground. He read the word "material" in Section 103(b) of the Copyright Act to imply content, not order. *Id.* at 53. See also *supra* text accompanying note 26.

75. Nor can Rural claim originality in its . . . arrangement of facts. The white pages do nothing more than list Rural's subscribers in alphabetical order. This arrangement may, technically speaking, owe its origin to Rural; no one disputes that Rural undertook the task of alphabetizing the names itself. But there is nothing remotely creative about arranging names alphabetically in a white pages directory. It is an age-old practice, firmly rooted in tradition and so commonplace that it has come to be expected as a matter of course. . . . It is not only unoriginal, it is practically inevitable. This time-honored tradition does not possess the minimal creative spark required by the Copyright Act and the Constitution.

Feist, 111 S. Ct. at 1297.

muster, it is hard to believe that any collection of facts could fail.”⁷⁶

2. The Labor or “Sweat of the Brow” Theory

Courts have often granted copyright protection based solely on the compiler’s efforts, in order to protect the compiler’s investment of time and money expended in creating a compilation. Under the *labor* or “*sweat of the brow*” theory, a court finds sufficient originality as long as the compiler independently collected the information for his compilation without directly copying it from another copyrighted compilation. In sharp contrast to the arrangement theory, the labor theory protects a compilation regardless of its arrangement. A major criticism of the labor theory is that it extends copyright protection to individual facts.⁷⁷

Unlike the arrangement theory which has an identifiable basis in the Copyright Act,⁷⁸ the labor theory is at best obliquely supported by Section 101’s reference to “collection and assembling of preexisting materials or of data.” In addition, the language of Section 103(b)⁷⁹ seems to preclude the labor theory from copyright protection. Despite its weak statutory support, the labor theory is amply supported in the case law and has been very popular with courts, particularly those in the Seventh and Eight Circuits. Its popularity stems from intuitive notions about rewarding a person’s hard work.⁸⁰

A foundational case for the labor theory is the 1922 decision in *Jeweler’s Circular Publishing Co. v. Keystone Publishing Co.*⁸¹ made by the Court of Appeals for the Second Circuit. The *Jeweler’s Circular* court upheld a copyright infringement claim against the defendant for copying the plaintiff’s directory of trademarks used by

76. *Id.*

77. Gorman, *supra* note 1, at 573. Defenders of the labor theory correctly seek a compilation theory more substantial than the easily circumvented arrangement theory. *See* Denicola, *supra* note 1, at 530. Yet the arguments of other defenders that the labor theory does not protect facts in uncopyrighted sources or facts collected through personal effort ignores the practical problem of access to these facts. Note, *supra* note 15, at 1009-10. Many facts, such as stock quotes and telephone numbers, are only available from a single source. A labor theory could give copyright protection resembling a monopoly to these sources.

78. *See supra* text accompanying note 24.

79. “The copyright in a compilation . . . extends only to the *material* contributed by the author . . .” 17 U.S.C. § 103(b) (emphasis added). The word material implies substance, not labor or effort. *See also infra* text accompanying notes 93-97.

80. “The effort of authorship can be effectively encouraged and rewarded only by linking the existence and extent of protection to the total labor of production. . . . [To do otherwise would be] to ignore the central contribution of the compiler.” Denicola, *supra* note 1, at 530.

81. 281 F. 83 (2d Cir. 1922), *cert. denied*, 259 U.S. 581 (1922).

jewelers and distributing its own competing directory. The court relied on the compiler's industrious collection of the data for its compilation as the basis for copyright protection.⁸²

Fifteen years after *Jeweler's Circular*, the Court of Appeals for the Ninth Circuit reaffirmed the *Jeweler's Circular* reasoning in *Leon v. Pacific Telephone & Telephone Co.*⁸³ The *Leon* court found that the defendant had infringed the plaintiff's copyright in its San Francisco Bay Area telephone directories. The defendant copied the listings from the plaintiff's directory and then inverted the listings in its own directory so that it was organized by telephone number and not by name. *Leon* reaffirmed the labor theory of *Jeweler's Circular* by citing several English cases which focused on the original compiler's labor and expense.⁸⁴ Recent cases also adopted the labor theory to protect an original compiler's labor and investment from infringement.⁸⁵

a. *The Labor or "Sweat of the Brow" Theory in Feist*

Feist disputed the cases which followed the labor theory. Feist cited courts which had rejected the labor theory and argued that the labor theory impermissibly protected individual facts.⁸⁶ Feist also argued that under the statutory definition of compilations in Section 101 of the Copyright Act labor was not an element of originality which could invoke copyright protection.⁸⁷ Rural responded by arguing that the cases following the labor theory — spanning nearly seventy years since the 1922 *Jeweler's Circular* decision — established the labor theory standard for copyright protection in compi-

82. The man who goes through the streets of a town and puts down the name of each of the inhabitants, with their occupations and their street number[s], acquires material of which he is the author. He produces by his labor a meritorious composition, in which he may obtain a copyright, and thus the exclusive right of multiplying copies of his work.

Id. at 88.

83. 91 F.2d 484 (9th Cir. 1937).

84. *Id.* at 487.

85. See, e.g., *Illinois Bell Tel. Co. v. Haines and Co.*, 905 F.2d 1081, 1086 (7th Cir. 1990) ("Everyone must do the same basic work, the same 'industrious collection.' A subsequent compiler is bound to set about doing for himself what the first compiler has done."), *vacated*, 111 S. Ct. 1408 (1991); *Rockford Map Publishers, Inc. v. Directory Serv. Co.*, 768 F.2d 145, 149 (7th Cir. 1985) ("The second compiler must assemble the material as if there had never been a first compilation . . ."), *cert. denied*, 474 U.S. 1061 (1986); *Schroeder v. William Morrow & Co.*, 566 F.2d 3, 5 (7th Cir. 1977) ("[O]nly 'industrious collection,' not originality in the sense of novelty, is required.").

86. Feist Brief, *supra* note 31, at 15-18. See also *supra* note 43.

87. For Feist's interpretation of the § 101 requirements for a compilation, see *supra* text accompanying note 53.

lations under both the Copyright Act of 1909⁸⁸ and the current 1976 Copyright Act.⁸⁹ Rural also supported the labor theory on the policy grounds that no compilation is produced without labor and thus protection for labor is one ingredient which maintains the incentive to produce factual compilations.⁹⁰ Neither Feist nor Rural questioned the premise that labor alone was insufficient to justify copyright protection for a compilation.⁹¹

Despite Rural's best efforts in arguing for the labor theory, both legal and practical arguments in *Feist* led to the theory's ultimate demise. For example, during the oral arguments in *Feist*, Justice Souter made a particularly interesting analysis of Section 103(b)⁹² of the Copyright Act which indicated that the language of the Copyright Act may preclude the labor theory altogether. Justice Souter focused on the word "material," reading it to mean that content is the touchstone for protection, not the process or effort of compilation.⁹³ Rural's counsel replied that the material contributed by Rural in its white pages listings was its "hard work or labor."⁹⁴ Justice Souter persisted in distinguishing "material" from "hard work or labor", but further examination of what "material" means in the context of Section 103(b) was not pursued.⁹⁵ Justice Souter's point is well-taken. The legislative history for Section 103(b) is silent on the material-effort distinction, but emphasizes that the Copyright Act of 1976 more sharply defines the line between preexisting and new material than the previous Copyright Act of 1909. The legislative history uses the word "material" and makes no reference to any other criteria for protection in a compilation.⁹⁶ Therefore, Congress thought it sufficient to use the word "material" in

88. Act of March 4, 1909, ch. 320, § 5(a), 35 Stat. 1076 (1909).

89. See Rural Brief, *supra* note 31, at 25-28.

90. Rural does not (and the courts below certainly did not) contend that effort alone, in the absence of originality, warrants copyright protection. Granted that directories are 'original works of authorship,' the policies of the [Copyright] Act provide that copyright protection sweeps broadly enough to encourage the 'industrious collection' that is necessarily required for the creation of any compilation.

Rural Brief, *supra* note 31, at 39.

91. Feist Brief, *supra* note 31, at 16-17; Rural Brief, *supra* note 31, at 32.

92. See *supra* text accompanying note 26.

93. Transcript, *supra* note 32, at 51. "[M]y suggestion is that material implies something about the content of the work rather than something about the effort that goes into producing the work." *Id.* at 52.

94. *Id.*

95. *Id.* at 53-54.

96. "The most important point here is one that is commonly misunderstood today: copyright in a 'new version' covers *only the material added by the later author*, and has no effect one way or the other on the copyright or public domain status of the preexisting mate-

Section 103(b) without making any reference to effort or labor. Accepting the premise that Congress meant what it said in Section 103(b) — that “material” was used in its ordinary sense of substance or content — then it would appear that copyright protection for compilations extends only to the content provided by the compiler, not to his effort or hard work.⁹⁷

Other legal analysis also doomed the labor theory. Feist noted that the labor theory had been rejected by several circuits.⁹⁸ Most importantly, the Ninth Circuit, the circuit in which the landmark labor theory case of *Leon v. Pacific Telephone & Telephone Co.*⁹⁹ was decided, rejected *Leon*’s reasoning to the extent that labor is the defining characteristic of originality for compilations.¹⁰⁰ The Ninth Circuit rejected the reasoning of *Leon* because it felt that the labor theory caused unnecessary duplication of effort — in opposition to the policy of copyright law.¹⁰¹ The Second Circuit has also rejected the labor theory as restricting public access to information.¹⁰² Clearly, the labor theory was not as universally embraced as Rural’s

rial.” H.R. REP. NO. 1476, 94th Cong., 2d Sess. 57 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5670 (emphasis added).

97. If state common law copyright had extended protection to labor or effort, then that protection was expressly preempted by Section 301(a) of the 1976 Copyright Act:

[A]ll legal or equitable rights that are equivalent to any of the exclusive rights within the general scope of copyright as specified by section 106 in works of authorship that are fixed in a tangible medium of expression and come within the subject matter of copyright as specified by sections 102 and 103 . . . are governed exclusively by this title.

17 U.S.C. § 301(a) (1988) (emphasis added). Although the labor theory cases advanced by Rural were decided under federal copyright law, § 301(a) adds some additional support to the notion that the “material” standard of § 103(b) is the sole standard for determining the copyrightable contribution of a compiler.

98. Feist Brief, *supra* note 31, at 16-18.

99. 91 F.2d 484 (9th Cir. 1937). See also *supra* text accompanying notes 81, 83.

100. *Worth v. Selchow & Righter Co.*, 827 F.2d 569, 573 (9th Cir. 1987), cert. denied, 485 U.S. 977 (1988) (“[T]o the extent that *Leon* suggests that research or labor is protectible [sic], later cases have rejected that theory.”); *Black’s Guide, Inc. v. Mediamerica, Inc.*, 1990 WL 169141, at *4, (N.D. Cal. Aug. 15 1990) (“It is clear from subsequent cases, however, that the rationale which was behind the *Leon* decision . . . more recently has been rejected, at least insofar as it involves the appropriation of labor and skill.”)

101. We . . . cannot subscribe to the view that an author is absolutely precluded from saving time and effort by referring to and relying upon prior published material. . . . It is just such wasted effort that the proscription against the copyright of ideas and facts, and to a lesser extent the privilege of fair use, are designed to protect.

Worth, 827 F.2d at 574.

102. The statute thus requires that copyrightability not be determined by the amount of effort the author expends, but rather by the nature of the final result. To grant copyright protection merely on the “sweat of the author’s brow” would risk putting large areas of factual research material off[-]limits and threaten the public’s unrestrained access to information.

arguments implied.¹⁰³

On a practical level, the labor theory does not make sense as applied to the white pages in *Feist*. Rural procured the white pages listings in the regular course of its business. Rural did not make an independent canvass to gather the listings,¹⁰⁴ so why must Feist travel door-to-door asking customers for their phone numbers and addresses? Feist noted that an independent canvass covering 46,000 telephone subscribers spread out over 16,000 square miles in rural Kansas was economically unfeasible.¹⁰⁵ The constitutional provision creating federal copyright law speaks in terms of promoting progress,¹⁰⁶ not making subsequent authors retrace the exact footsteps of their predecessors.¹⁰⁷

b. The End of the Labor or "Sweat of the Brow" Theory

The Supreme Court in *Feist* rejected the labor theory as inconsistent with the language of the Copyright Act and, more fundamentally, with its underlying policies. The Court agreed that it may appear unfair that a compiler's efforts may be copied freely by another, but noted that the constitutional objective of copyright law is to promote the progress of the sciences and arts.¹⁰⁸

Financial Information, Inc. v. Moody's Investors Serv., Inc., 808 F.2d 204, 207 (2d Cir. 1986), *cert. denied*, 484 U.S. 820 (1987).

103. Rural did not cite in its Brief either of the Ninth or Second Circuit cases that rejected the labor theory.

104. Rural brushed over this point and concluded that the listings in the white pages were "collected, assembled, selected, arranged, and coordinated by Rural." Rural Brief, *supra* note 31, at 18 n.10. *See also* Feist Brief, *supra* note 31, at 11.

105. Feist Brief, *supra* note 31, at 10. In lieu of getting a license from Rural to use its white pages listings, Feist went so far as to verify the listings it had copied. *Feist*, 111 S. Ct. at 1286-87.

106. U.S. CONST. art. I, § 8, cl. 8.

107. *See supra* note 102.

108. It may seem unfair that much of the fruit of the compiler's labor may be used by others without compensation. . . . [T]his is not "some unforeseen by-product of a statutory scheme." . . . It is, rather, "the essence of copyright," . . . and a constitutional requirement. The primary objective of copyright is not to reward the labor of authors, but "[t]o promote the Progress of Science and useful Arts." . . . To this end, copyright assures authors the right to their original expression, but encourages others to build freely upon the ideas and information conveyed by a work. . . . This principle, known as the idea/expression or fact/expression dichotomy, applies to all works of authorship. As applied to a factual compilation, assuming the absence of original written expression, only the compiler's selection and arrangement may be protected; the raw facts may be copied at will. This result is neither unfair nor unfortunate. It is the means by which copyright advances the progress of science and art.

The Supreme Court viewed the labor theory as the result of many courts losing sight of the implied originality requirement in the 1909 Copyright Act. Rather than look for the required originality in factual compilations, these labor theory courts read the enumeration of "directories" as the proper subject matter of copyright in the 1909 statute to mean that all directories were automatically copyrightable.¹⁰⁹ Apparently, these labor theory courts were not content with this approach alone so they developed the "sweat of the brow" or "industrious collection" approach to reward the hard work of compilers of factual works.¹¹⁰ The Court noted that of the many problems with the labor theory, its most glaring flaw was to extend protection in a compilation beyond a compiler's original selection and arrangement to the facts themselves.¹¹¹ Finally, the Court indicated that the 1976 Copyright Act was written to remove the confusion surrounding copyrightability by making the originality requirement explicit in Section 102(a)¹¹² and by re-writing the requirements for compilations in general.¹¹³

The reasons given by the Court for rejecting the labor theory are readily acceptable on their face. However, several questions linger as to whether the Court's analysis convincingly dispenses with the labor theory. The Court read the ambiguity over originality in the 1909 Copyright Act as causing lower courts to temporarily lose sight of the originality requirement.¹¹⁴ But these courts lost their sights for nearly seventy years, beginning with the 1922 *Jeweler's Circular Publishing Co. v. Keystone Publishing Co.*¹¹⁵ decision. Further, courts continued to adhere to the labor theory for the thirteen years following the January 1, 1978 effective date¹¹⁶ of the 1976 Copyright Act. The Court also indicated that the 1976 Copyright Act was drafted to maintain the established standards of originality developed since the 1909 Act.¹¹⁷ But the Court never cited an authority to refute the idea that Congress may have implicitly recog-

Feist, 111 S. Ct. at 1289-90 (citations omitted).

109. *Id.* at 1290-91.

110. *Id.* at 1291.

111. *Id.* ("Under the [labor theory] doctrine, the only defense to infringement was independent creation"). The Court cited its 1918 decision in *International News Serv. v. Associated Press*, 248 U.S. 215 (1918) as an example which makes clear that the 1909 Copyright Act did not support the labor theory. The *Feist* Court likened the factual news events in *International News*, which were not copyrightable, to the factual information in *Feist*. *Id.* at 1292.

112. *Id.* at 1292-93.

113. *Id.* at 1293-94.

114. *Id.* at 1291.

115. 281 F. 83 (2d Cir. 1922), *cert. denied*, 259 U.S. 581 (1922).

116. See 17 U.S.C. §§ 301-304 (1988).

117. *Feist*, 111 S. Ct. at 1292-93.

nized the labor theory as a valid, albeit judicially-developed, standard for originality in compilations. Of course, had Congress acquiesced to the labor theory at some point, it seems likely that at least one Justice would have pointed this out in *Feist*. But *Feist* was a 9-0 unanimous decision with Justice Blackmun concurring in the judgment (without writing separately). It appears that the Supreme Court simply viewed the labor theory as an obvious mistake in need of correction.

3. The Selection Theory

A less frequently-used compilation theory focuses on the *selection* and judgment made by the compiler in choosing information for his compilation. Under the selection theory, the originality requirement is met by the compiler's exercise of his judgment and discretion in selecting information.¹¹⁸ Like the labor theory, the selection theory is process-oriented in that the focus is on the actions of the compiler. Unlike the labor theory, the selection theory grants copyright protection based on the compiler's discretion as to what information will be useful in the compilation, not based on the compiler's labor.

The selection theory is reflected in the Copyright Act through the references in Section 101 to collected materials that are selected or coordinated so as to produce a copyrightable compilation. This theory is also reflected in case law: copyright protection based on selection has been found for yellow pages advertising,¹¹⁹ a list of baseball cards,¹²⁰ the choice of stocks in a stock index,¹²¹ a list of restaurants serving good food,¹²² and a list of names for a social register.¹²³

Most applications of the selection theory have been to small collections of information, perhaps because of a perception that compilers exercise more original selection when creating small compilations than they do when creating large, comprehensive compilations.¹²⁴ However, the size of the collection of data is not indicative

118. Gorman, *supra* note 1, at 572 n.30.

119. Southern Bell Tel. & Tel. Co. v. Associated Tel. Directory Publishers, 756 F.2d 801, 810 (11th Cir. 1985).

120. Eckes v. Card Prices Update, 736 F.2d 859, 862-63 (2d Cir. 1984).

121. Dow Jones & Co. v. Chicago Bd. of Trade, 546 F. Supp. 113, 116 (S.D.N.Y. 1982) (but finding fair use by defendant).

122. Adventures in Good Eating, Inc. v. Best Places to Eat, Inc., 131 F.2d 809, 812-13 (7th Cir. 1942).

123. List Publishing Co. v. Keller, 30 F. 772, 773-74 (C.C.S.D.N.Y. 1887).

124. Note, *supra* note 15, at 1006.

of the compiler's original selection. The judgment and discretion used to select information for a large compilation may be equal in quality, but not in quantity, to that used to compile a small collection.¹²⁵ The compiler's original selection occurs when he designs his compilation and determines the types of information he will include in it. The process of collecting and updating the information in a compilation merely reflects the implementation of the compiler's design and not his original selection.

a. The Selection Theory in Feist

Feist defined selection as the exercise of judgment in deciding which facts to copy from a given source of information.¹²⁶ Feist then contended that Rural did not select the items for its white pages listings: Rural merely reproduced the alphabetical listings for all of its telephone subscribers.¹²⁷ Feist concluded that because Rural exhibited no selection, Rural's white pages did not qualify for copyright protection as a compilation.¹²⁸ To a degree, Feist's argument that Rural exhibited no selection mirrors the criticisms of the arrangement theory as applied to telephone directories:¹²⁹ Rural simply printed the listings for each of its telephone subscribers as required by law.¹³⁰

In reply, Rural argued that Feist's selection theory "would have the perverse effect of encouraging compilers to make their works less inclusive — and therefore less useful — so that they could claim to have exercised 'selection' in their choice of data."¹³¹ Rural read Feist's selection argument to mean that the publisher of *all* facts from a particular set of data would exhibit less selection than the publisher of a subset. This is a fair reading of what Feist proposed and raises an important question about the selection theory in general. In fact, Feist likened compiling all facts from a collection of data to mere labor, not copyrightable selection.¹³²

Feist had the right idea about selection but it muddled the waters by likening the compilation of all facts to labor. Feist should have recognized that selection — as the exercise of a compiler's judgment and discretion in choosing facts — might require the

125. See *Id.* at 1006-07.

126. Feist Reply Brief, *supra* note 32, at 7.

127. *Id.*

128. *Id.* at 7 & n.5, 8.

129. See *supra* note 74 and accompanying text.

130. Feist Reply Brief, *supra* note 32, at 7.

131. Rural Brief, *supra* note 31, at 35 (footnote omitted).

132. Feist Reply Brief, *supra* note 32, at 8-9.

compiler to include all facts from a particular source of data.¹³³ For example, a compiler of baseball trading card prices must include an entry for each card issued in a particular baseball season if the compiler wishes to serve the general baseball card collector. The compiler's selection is shown by his decision to serve a particular collector and tailor his compilation to include the values of all baseball trading cards. Similarly, the same compiler who wishes to serve collectors interested solely in American League players would compile only players from that league. Again, the compiler has exercised his judgment by tailoring his compilation to the needs of his target user.¹³⁴

The Supreme Court accepted Feist's contention that Rural's "selection" of listings for its white pages exhibited no originality sufficient to invoke copyright protection.¹³⁵ Rural was further undermined by its status as the telephone company and by the very nature of white pages. As the local telephone company directed by state law to produce white pages, the Court found that in some sense state law, not Rural, was responsible for the selection in its directory.¹³⁶ Further, the highly generic nature of the whites pages themselves precluded any originality on Rural's part.¹³⁷

Because the Supreme Court viewed the originality standard as being very low,¹³⁸ the Court's approach to the selection theory

133. At oral argument, Justice Scalia rejected the claim of Feist's attorney that compiling a list of a whole range of data is not selection:

When you say select the whole range of data, you're begging the question. I mean, deciding what the range is is itself a selection. You can decide to publish all the restaurants in town or you can decide to publish just the 100 best restaurants. But either one is a selection.

Transcript, *supra* note 32, at 14.

134. *Cf.* Rural Brief, *supra* note 31, at 35 n.20; *Eckes v. Card Prices Update*, 736 F.2d 859, 862-63 (2d Cir. 1984).

135. The selection . . . of Rural's white pages do not satisfy the minimum constitutional standards for copyright protection. . . . In preparing its white pages, Rural simply takes the data provided by its subscribers and lists it alphabetically by surname. The end product is a garden-variety white pages directory, devoid of even the slightest trace of creativity.

Rural's selection of listings could not be more obvious: it publishes the most basic information—name, town, and telephone number—about each person who applies to it for telephone service. This is "selection" of a sort, but it lacks the modicum of creativity necessary to transform mere selection into copyrightable expression. Rural expended sufficient effort to make the white pages directory useful, but insufficient creativity to make it original.

Feist, 111 S. Ct. at 1296.

136. *Id.* at 1296-97.

137. "Rural's white pages are entirely typical." *Id.* at 1296.

138. "To be sure, the requisite level of creativity is extremely low; even a slight amount will suffice. The vast majority of works make the grade quite easily, as they possess some

would protect compilations of all but the most generic, standardized works. In other words, as long as a compiler does not create a work on par with a white pages telephone directory¹³⁹ his compilation is likely to win copyright protection. Thus, even selecting "all" of the facts for a particular collection of information would appear to invoke copyright protection under the selection theory.¹⁴⁰

V. THE SCOPE OF COPYRIGHT PROTECTION IN ELECTRONIC DATA BASES UNDER *FEIST PUBLICATIONS, INC. V. RURAL TELEPHONE SERVICE CO.*

Electronic data bases are sources of great economic value to their compilers.¹⁴¹ It is thus no surprise that the *Feist* decision raised eyebrows as to the scope of copyright protection in electronic compilations.¹⁴² By jettisoning the labor theory, the Supreme Court eliminated the one compilation theory which offered protection to compilers for their investment of time and money in compiling economically and socially useful, but decidedly unoriginal, factual compilations. Under *Feist*, these same compilers must now show originality in the arrangement or selection of their works.

It is much easier for a compiler to show evidence of his hard work and investment to satisfy the labor theory than to demonstrate his originality in compiling a highly factual, highly standardized compilation. But the Supreme Court in *Feist* recognized this dilemma by reiterating the very low threshold of originality required in the arrangement or selection of a compilation in order to invoke copyright protection.¹⁴³ As this Comment demonstrates, the pro-

creative spark, 'no matter how crude, humble or obvious' it might be." *Id.* at 1287 (citations omitted).

139. See *supra* text accompanying note 76.

140. Originality requires only that the author make the selection . . . independently (i.e., without copying that selection or arrangement from another work), and that it display some minimal level of creativity. Presumably, the vast majority of compilations will pass this test, but not all will. There remains a narrow category of works in which the creative spark is utterly lacking or so trivial as to be virtually nonexistent.

Feist, 111 S. Ct. at 1294 (emphasis added).

141. See *supra* note 6 and accompanying text.

142. "David Lange, a copyright specialist[,] . . . said the decision might prove 'revolutionary for the information industry,' with the double-edged result of making information more widely available to the public and at the same time diminishing the economic value of data bases that are essentially compilations of facts." Linda Greenhouse, *Copyright Protection Limited*, N.Y. TIMES, Mar. 28, 1991, at C1. The general counsel for the Information Industry Association trade group said the *Feist* decision would make compilers think twice about making the investment to compile a factual data base. *Id.*

143. *Feist*, 111 S. Ct. at 1294.

cess of creating and compiling an electronic data base involves sufficient selection which would be likely to clear the originality hurdle to secure copyright protection for many factual data bases. Given the Court's view of the white pages as the lowest common denominator of printed compilations,¹⁴⁴ it is likely that most electronic data bases will show sufficient originality in selection, and possibly even arrangement, to warrant copyright protection under *Feist*.¹⁴⁵

A. *The Differences Between Printed and Electronic Compilations of Facts*

Before a compilation of facts is published in either a printed form or in an electronic data base, the compilation reflects the developer's organization and selection of facts collected from many different sources. Once published, however, there are important distinctions between printed and electronic compilations.¹⁴⁶ Printed compilations can be perceived by the unaided eye while electronic data bases can only be perceived by a person through the use of a computer and data base software. Printed compilations are frozen in their appearance on the page and the success or failure of these compilations is determined by the usefulness of their fixed arrangement. By contrast, electronic data bases permit their users to rearrange information and display subsets of information through the use of data base software.¹⁴⁷ Finally, unlike static printed compilations, electronic data bases are dynamic: their contents are updated

144. See *supra* text accompanying note 76.

145. Because of the generic characteristics of white pages, the trade associations representing electronic data base compilers argued that *Feist* was an inappropriate opportunity for the Supreme Court to fashion a general compilation rule. IIA/ADAPSO Brief, *supra* note 3, at 10. Clearly, the trade associations feared that a general rule derived from a white pages case might underprotect electronic data bases.

The trade associations noted that few other commercially important data bases would reflect all of the common characteristics of white pages listings. Data bases covering similar subjects may vary in their format, presentation, flexibility, and depth. The *amicus* brief offers the example of a financial data base. One company's data base may include only "bid and ask" prices for stocks while a competitor's data base may add information such as financial reports, 52 week highs and lows, and other statistical analysis. The brief argues that the value of commercial data bases lies in how they bring together relevant information from a variety of sources. *Id.* at 12. Under *Feist*, this argument would mirror the selection theory.

146. Note, *supra* note 15, at 1013.

147. The data in an electronic data base is organized into a fixed arrangement but this grouping is only relevant to the computer programmer who adds or removes information from the data base. From the perspective of a data base user, this internal arrangement is usually irrelevant. A data base is useful not because of the internal arrangement of its information but because a user can rearrange and manipulate the information to suit her needs. In certain situations, a data base user may notice the consequences of a particular internal arrangement of information which may affect the data base's utility. For example, a data base which stores information based on the frequency with which it is requested by users may be

with current information and purged of obsolete information. In large part, the success of a data base is determined as much by the flexibility it permits in rearranging data as it is by the types of information it includes and the comprehensiveness of its particular compilation of facts.¹⁴⁸

B. *Electronic Data Bases under the Copyright Act of 1976*

Congress established the National Commission on New Technological Uses of Copyrighted Works ("CONTU") in 1974 to address the copyright issues raised by computer and photocopier technology. As part of its mission, CONTU examined copyright in computer data bases.¹⁴⁹ Although Congress did not explicitly adopt the CONTU Final Report as legislative history, commentators and courts have referred to CONTU's report for guidance with computer-related copyright questions.

The CONTU Final Report recognized that computer data bases were merely older, printed compilations dressed up in new, electronic clothes. As such, CONTU viewed computer data bases as protectable compilations under the Copyright Act.¹⁵⁰ CONTU framed its view of the policy underlying copyright protection for computer data bases in familiar terms of creating incentives balanced against widespread public access to electronic compilations.¹⁵¹

frustratingly slow for a user who is interested in obscure, rarely-requested facts. *See id.* at 1014.

148. *Id.*

149. Denicola, *supra* note 1, at 531 & n.74.

150. "Under the new law, a data base is a compilation and thus a proper subject for copyright." National Commission on New Technological Uses of Copyrighted Works, Final Report of the National Commission on New Technological Uses of Copyrighted Works 38 (1978) [hereinafter CONTU Final Report].

Citing to Section 102(a) of the Copyright Act, the CONTU Final Report also noted that the electromagnetic fixation of a computer data base met the fixation requirements for copyright protection.

This entitlement to copyright is not diminished by the fixation of the data base in a medium requiring the intervention of a computer. . . . Accordingly, a data base, whether printed in traditional hard copy or fixed in an electromagnetic medium, is protected by copyright under the terms of the new law.

Id. (footnotes omitted).

151. "Copyright applied to data bases should encourage the development and dissemination of useful stores of information to make this information readily available to the public." *Id.* at 39.

CONTU also reiterated the basic principle that individual facts within a data base are not protected by copyright:

Similar . . . to a telephone directory, copyright in a dynamic data base protects no individual datum, but only the systematized form in which the data are presented. The use of one item retrieved from such a work — be it an address,

CONTU did not explicitly address the arrangement, labor, and selection theories of compilations. Yet the CONTU Final Report offers some insight into how the commissioners viewed the use of information retrieved from a copyrighted data base. Initially, the CONTU commissioners frowned upon the wholesale copying of information from a computer data base for a commercial purpose — even if access to the data base was procured legally.¹⁵² The commissioners next intimated that copyright in a data base lies in its “systematized form” which suggests protection based on either the arrangement or selection theory. The commissioners, in adopting the substantial similarity standard for copyright infringement of data bases,¹⁵³ cited the infringement standards developed by the directory cases and cited to three cases which followed either the labor or arrangement theories.¹⁵⁴

Because the CONTU Final Report failed to recommend a specific compilation theory to apply to computer data bases, and given the report’s inconsistent references to all three theories, the value of the Final Report is limited. The Final Report offers little guidance as to which compilation theory the commissioners thought best suited to electronic data bases.

C. *Creating an Electronic Data Base*

Creating an electronic data base involves numerous decisions

a chemical formula, or a citation to an article — would not under reasonable circumstances merit the attention of the copyright proprietor. Nor would it conceivably constitute infringement of copyright.

Id. at 42.

152. *Id.* at 41.

153. “The retrieval and reduplication of any substantial portion of a data base, whether or not the individual data are in the public domain, would likely constitute a duplication of the copyrighted element of a data base and would be an infringement.” *Id.* at 42.

The substantial similarity standard poses interesting problems for electronic data base publishers. Many data bases are accessed over telephone lines or some other external communications link. Users of these data bases could copy small portions of a data base over time so as to collect a substantial portion of the data base’s information. Unless the data base vendor monitors the usage of each customer closely, this kind of incremental copying of a substantial amount of a data base could go unnoticed. Other data bases are accessed via transportable mediums such as magnetic disks or optical CD-ROM disks. Monitoring the amount of information copied from these kinds of sources is extremely difficult, if not impossible. *See supra* text accompanying note 10.

154. CONTU Final Report at 42 n.171 (citing *Leon v. Pacific Tel. & Tel. Co.*, 91 F.2d 484 (9th Cir. 1937); *Jeweler’s Circular Publishing Co. v. Keystone Publishing Co.*, 281 F. 83 (2d Cir. 1922), *cert. denied*, 259 U.S. 581 (1922); *New York Times, Co. v. Roxbury Data Interface, Inc.*, 434 F. Supp. 217, 222-23 (D.N.J. 1977)). *Jeweler’s Circular* and *Leon* stressed the labor theory. *See supra* text accompanying notes 82 & 84. *New York Times* focused on a variant of the arrangement theory. *See supra* note 66.

about its technical design, the degree of control built into its structure to accommodate the needs of different users, the scope of its actual contents, and its sources of information. These decisions are similar to those made by the compiler of a printed data base with one important exception: the compiler of an electronic data base must decide how to best implement the dynamic flexibility that distinguishes electronic data bases from static printed compilations.

The typical stages of data base development include (1) specification of general requirements and goals; (2) evaluation of alternatives; (3) design following the chosen alternative; and (4) implementation of the design.¹⁵⁵ The specification stage is usually a feasibility study coupled with an elaboration of the computer hardware and software requirements for the proposed data base.¹⁵⁶ The evaluation stage determines the best approach for meeting the requirements and goals of the data base users.¹⁵⁷ During the final stage, implementation, the data base project team writes and tests the software program that creates and controls the data base.¹⁵⁸ The implementation stage is the practical culmination of the conceptual decisions made during the specification, evaluation, and design stages.

Because the compilation theory of *Feist* focuses on arrangement and selection,¹⁵⁹ the most interesting and important development stage for electronic data bases is the design stage. It is during the design stage of the data base that the compiler makes basic decisions regarding, (1) the nature of the particular data base, (2) the individual units of information in the data base and their relationship to one another, and (3) the overall model for organizing the data base and presenting it to the user. These decisions reflect how the electronic data base compiler arranges and selects so as to create a data base that meets the needs of its users.

There are several parts to the design stage, including these especially significant portions which bear directly on the information stored within a data base.

The compiler first decides how information in the data base will correspond to information in the real world. In other words, the compiler determines the basic unit of information in the data

155. DAVID KROENKE, DATABASE PROCESSING: FUNDAMENTALS, DESIGN, IMPLEMENTATION 21 (2d ed. 1983) [hereinafter KROENKE].

156. *Id.* at 22-27. These requirements are often determined by contacting potential users to understand their needs.

157. *Id.* at 27.

158. *Id.* at 40-41.

159. See *supra* note 52 and accompanying text.

base and how this unit is represented.¹⁶⁰ Traditionally, information in a data base has been organized around the record.¹⁶¹ A common analogy to a data base record is a paper index card or file folder holding a piece of information or an aggregation of pieces. The compiler's use of the record, for example, reflects his selection of a model for the information in the data base.¹⁶² By its nature any model imposes the compiler's artificial structure on the information in the data base.¹⁶³ Clearly, the best model for a data base is one consistent with the expectations of data base users. Thus, a compiler's selection of a model may be the most important choice he makes in the design stage.

Next, the compiler must account for change within the data base. Specifically, the compiler must decide how to govern changes to existing data and how to accommodate new information added to the data base or derived from existing data.¹⁶⁴ The inevitability of changes to a data base also means the compiler must design an "elastic" structure that permits changes to occur with a minimum of adverse effects on the data base.¹⁶⁵

Perhaps most importantly for the selection theory, the compiler must select appropriate categories for the information in the data base. The categorization of information for a data base must be tailored for the specific system.¹⁶⁶ For example, one data base of lawyers practicing in the United States may include categories for the name of a lawyer, her firm, and her firm's practice. Another data base serving a different clientele may include both name categories, omit the practice category, and add information about the firm's clients and representative cases. Still another data base may include all of these categories plus new ones.

Categorization in a data base does not stop at the abstract level. Categories may be sharpened at increasing levels of refinement depending on the nature of the information in the data base

160. WILLIAM KENT, DATA AND REALITY: BASIC ASSUMPTIONS IN DATA PROCESSING RECONSIDERED 1 (1978) [hereinafter Kent].

161. *Id.* at 36, 101-02. KROENKE, *supra* note 155, at 11-12, 182. By contrast, relational data bases use tables, not records, as their basic organizing feature. C.J. DATE, DATABASE: A PRIMER 249, 254 (1983).

162. KENT, *supra* note 160, at 93. "A model is a basic system of constructs used in describing reality. It reflects a person's deepest assumptions regarding the elementary essence of things. It may be called a 'world view.'" *Id.*

163. *Id.* at 94.

164. *Id.* at 8-11.

165. See generally, WILLIAM H. INMON, EFFECTIVE DATA BASE DESIGN 62-78 (Leonard Krauss ed. 1981).

166. KENT, *supra* note 160, at 13.

and its uses.¹⁶⁷ However, selecting the category in which information belongs is not always clearcut: some categorizations are self-evident while others are debatable and still others are purely arbitrary. In the end, a particular categorization ideally should reflect the compiler's selection based on his recognition of what is most meaningful and useful to the users of the data base.¹⁶⁸ Part and parcel of categorizing information is defining the relationships between different pieces of information.¹⁶⁹

Finally, one level above identifying and classifying information, a compiler must choose an appropriate description for each piece of information. This normally involves predefining the characteristics of information, such as the letters, numbers, or symbols that are permitted in the description and the length of the description.¹⁷⁰ Selecting an appropriate description for the information in a data base is critical not only for alerting users as to the appropriate type and form for particular entries, but also for optimizing computer storage and performance.¹⁷¹

D. *Applying the Compilation Theories of Feist to Electronic Data Bases*

1. Protection Under the Arrangement Theory

The arrangement theory invokes copyright protection based on originality in the physical layout of information in a compilation.¹⁷² The Court in *Feist* was prepared to recognize originality in any arrangement as long as it exhibited enough creativity to distinguish it from a generic, standardized arrangement.¹⁷³ For electronic data bases, the arrangement theory provides very limited copyright protection, perhaps prohibiting only the exact copying of the actual magnetic or other medium for storing a data base. At a technical level, invisible to most users, a data base possesses a physical arrangement that reflects the technical design and skill of the software engineer who designed the data base. This physical arrangement of a data base would qualify for copyright protection under the ar-

167. *Id.*

168. "Then the notions of category . . . have to be reexamined . . . to arrive at a set meaningful to all users." *Id.* at 14.

169. *Id.* at 63.

170. *Id.* at 23. Kent identifies three levels of description: the multiple views level as seen by the user, the physical layout level of data stored internally by the data base, and the conceptual level which specifies the content of information in the data base. *Id.* at 25-26.

171. *Id.* at 25.

172. See *supra* text accompanying notes 66-68.

173. See *supra* note 75 and accompanying text.

arrangement theory if it met the originality requirement.¹⁷⁴ Thus, a data base user who copies an entire data base from a magnetic or optical CD-ROM disk could be a copyright infringer if the data base qualifies for protection.¹⁷⁵

Beyond literal, bit-for-bit copying of a data base, the arrangement theory provides little copyright protection against infringers who simply rearrange the facts in a data base before copying them. Presumably, the rearranged facts would be as worthwhile to the copier as the facts would be in their original arrangement. Thus, by exploiting the inherent flexibility of data bases, a user could easily avoid infringement even when copying an entire data base of facts. This would be a perverse result because it turns the most useful characteristic of data bases into the very tool used to escape copyright infringement. One commentator noted that the technical skill of data base users might be a practical bar against rearranging the facts in a data base to escape infringement.¹⁷⁶ It is true that a technically unsophisticated data base user might not be able to rearrange the facts in a complicated or heavily protected data base. However, the proliferation of easy to use "front ends" or user interfaces makes accessing and rearranging the facts in many once impenetrable data bases a simple matter of selecting a few commands. As the search programs for data bases become easier to use, the technical skill of a data base user will likely disappear as a potential bar for discouraging copyright infringement. As a result, under the arrangement theory the publishers of copyrightable data bases may be able to rely on little more than the promises of their users not to rearrange and copy the contents of a data base for commercial use.¹⁷⁷

174. Note, *supra* note 15, at 1022-23. As such, Professor Denicola's statement that computer data bases have "no particular arrangement to protect" is not technically accurate. However, his conclusion that data bases should be protected as "assemblage[s] of information" may have merit if he means something beyond the ordinary arrangement theory. See Denicola, *supra* note 1, at 531.

175. Copying in this instance could be shown through the substantial similarity between the original and copied data bases and the data base user's access to the original data base. See *supra* note 18.

176. Note, *supra* note 15, at 1023.

177. The best solution for data base publishers may be a licensing agreement with each data base user. Professor Ginsburg argues that compulsory licensing may be an appropriate solution. Under one of her proposals, a license would permit its holder to make a complete, identical copy of the licensed data base. Of course, the license holder would pay for this privilege. Ginsburg, *supra* note 19, at 1924-36.

2. Protection Under the Labor or "Sweat of the Brow" Theory

The labor theory protected a compiler's investment of time and money under the rationale that in many factual compilations there was little original to the compiler except his hard work.¹⁷⁸ However, *Feist* rejected the labor theory as inconsistent with the policies of the Copyright Act and its statutory requirement of originality in selection and arrangement.¹⁷⁹ Even though the labor theory has been rejected, it is useful to examine how this theory would apply to electronic data bases of facts. Rather than provide strong copyright protection for the compiler of a data base, application of the labor theory to data bases may conflict with the policy of copyright law and grant protection based on an outdated notion of "labor."

In apparently the only reported case applying the labor theory to an electronic data base, *Telerate Systems, Inc. v. Caro*,¹⁸⁰ the District Court for the Southern District of New York rejected the fair use defense of a defendant who produced computer software that allowed its users to gain access to the plaintiff's financial information data base. The court noted that the plaintiff's data base represented a significant investment of time and effort for the sole purpose of financial return.¹⁸¹ Thus, even though the data base was comprised of facts like stock quotations, its factual nature did not weigh in favor of (nor against) a finding of fair use.¹⁸² One commentator has criticized this result as conflicting with the copyright policy of encouraging widespread access to facts.¹⁸³ This criticism is valid and illustrates the primary drawback of the labor theory noted by the Supreme Court in *Feist*: that facts were protected by virtue of their compiler's effort and investment.¹⁸⁴

As applied to the initial design and implementation of a data

178. See *supra* notes 43, 77-80.

179. See *supra* note 108.

180. 689 F. Supp. 221 (S.D.N.Y. 1988).

181. *Id.* at 229.

182. *Id.*

183. The rationale of *Telerate Systems* — that the factual nature of databases does not weigh in favor of their fair use when they are expensive to create — runs counter to the policy of encouraging a free flow of facts and ideas, which underlies fair use doctrine and the first amendment. The predominant weighting of the market effect adequately protects both the database owner's pecuniary interest and the corresponding incentive for creativity. . . . Therefore, the mere fact that a work is difficult or expensive to create should not determine its "nature" for fair use purposes.

Jay Dratler, Jr., *Distilling the Witches' Brew of Fair Use in Copyright Law*, 43 U. MIAMI L. REV. 233, 303 n.375 (1988).

184. See *supra* note 111 and accompanying text.

base, a compiler's effort and investment would certainly qualify for protection under the labor theory.¹⁸⁵ The labor in designing and implementing a data base mirrors the "industrious collection" standard of the early labor theory cases that envisaged the compiler going door-to-door gathering his facts.¹⁸⁶ However, much of the initial design of a data base is predetermined by design standards and the need for compatibility with other data bases. Thus, even the labor in creating a data base from scratch is mitigated in kind and quantity as compared to the industrious collector.

However, once designed and implemented, the information in data bases is often compiled and updated using other data bases and computer programs. Much of this process is automated. Thus, the labor involved in compiling or updating an electronic data base may be minimal. Many of the largest producers of data bases are also their largest users¹⁸⁷ and these producers use sophisticated hardware and software to "roam computerized networks in search of data needed for the compilation."¹⁸⁸ This mental labor — knowing where to look and how to copy the necessary information — differs in kind from the physical labor of the compiler walking the streets in search of names and phone numbers. However, the degree to which mental labor can be automated by a computer mitigates the amount of labor actually expended in creating and compiling an electronic data base. For example, a simple software program could connect to a remote data base, copy the needed information to the local data base, and disconnect itself when all the data is copied. Mental labor is no less deserving of protection than physical labor, but at some point both the mental and physical labor involved in creating and updating electronic data bases may become so trivial that it does not warrant copyright protection.¹⁸⁹ Otherwise, the labor theory might protect effort no more significant than that of pressing a key.

3. Protection Under the Selection Theory

The selection theory provides copyright protection for a compilation based on the originality of the compiler's selection of information.¹⁹⁰ The Supreme Court in *Feist* defined original selection as

185. The stages of development for a data base reflect a great deal of time and money on the part of the compiler. See *supra* text accompanying notes 155-158.

186. See *supra* note 82 and accompanying text.

187. IIA/ADAPSO Brief, *supra* note 3, at 3.

188. *Id.* at 20.

189. See Note, *supra* note 15, at 1026.

190. See *supra* text accompanying note 118.

the compiler's use of enough creativity to raise his selection above the obvious and to include more than the most basic information for his particular compilation.¹⁹¹ Because the selection theory focuses on the compilation process, it shares the process focus with the labor theory. Thus, fears that the demise of the labor theory precludes courts from considering a compiler's actions are unfounded. However, under the *Feist* selection theory, a court must focus on the compiler's actions in selecting information for his compilation, not his labor in collecting that information. In other words, the selection theory provides protection to the data base compiler who shows originality in his selection of the nature and types of different information he includes in his data base.¹⁹²

The selection theory is well-suited for electronic data bases because it reflects the intrinsic value of data bases¹⁹³ and the selection process used to create and update data bases.¹⁹⁴ Unlike the arrangement theory, which provides protection based on an original, but fixed, arrangement, the selection theory accommodates the dynamic nature of data bases. Instead of dwelling on the easily modified physical arrangement of information in a data base, the selection theory focuses on the decisions made by the compiler in designing his data base. The data base compiler's selection of the basic unit of information, the model used to store information and present it to users, the appropriate structure for accommodating changes to data, and the appropriate description for the information¹⁹⁵ is likely to exhibit sufficient originality to invoke copyright protection.

In addition to these basic design decisions, a compiler selects appropriate categories for his data base. These categories reflect the nature of the information in the data base and must meet the expectations and needs of data base users.¹⁹⁶ The originality in the selection of categories comes from the compiler's recognition of the needs of his target users and his choice of categories which meet those needs. Clearly, many categories are self-evident, even essential, and appear to lack any trace of creativity sufficient to meet *Feist's* originality requirement. For example, a data base of lawyers

191. See *supra* note 135.

192. Cf. Gorman, *supra* note 1, at 572 n.30. "I suggest too that the very selection of the pieces [for a hypothetical piano songbook], apart from their sequencing, constitutes sufficient authorship for purposes of copyright protection, reflecting overall judgment regarding the technique-building and pleasant-listening qualities of the pieces chosen."

193. IIA/ADAPSO Brief, *supra* note 3, at 12.

194. *Id.* at 18-19.

195. See *supra* text accompanying notes 160-171.

196. See *supra* text accompanying note 166.

practicing in the United States must include categories for lawyer name, firm name, address, and telephone number to be useful. These categories alone in a data base would not show enough originality to invoke the selection theory and would be akin to the white pages listings. However, by adding categories to the data base, such as a list of representative clients, a description of practice areas, and a statistical breakdown of the attorneys in each office, a compiler begins to depart from the obvious and most basic information and evidences sufficient originality to secure protection under the selection theory.

Even without adding new categories to the data base, a compiler may show sufficient originality by defining new relationships between common categories.¹⁹⁷ Or a compiler may link common categories to larger categories which present standard information in a new way.¹⁹⁸ For example, an address category may be linked to a larger category which lists law firms by geographic region or varying state bar admission requirements. A compiler may also refine obvious categories into new, more focused categories. An address category can be refined into a county category and a list of representative litigation can be refined into a category containing the jurisdictions and courts in which the litigation occurred. In each case, as long as the compiler selects non-obvious categories or defines new relationships between common categories, he is likely to meet *Feist's* threshold requirement of originality for his selection.

VI. CONCLUSION

This Comment has shown that between the arrangement and selection theories of compilations accepted by the Supreme Court in *Feist Publications, Inc. v. Rural Telephone Service Co.*,¹⁹⁹ the selection theory is the most useful for determining whether an electronic data base of facts is protected by copyright law. As defined by the Court in *Feist*, the selection theory grants copyright protection in a factual compilation based on originality in the compiler's selection. In framing this standard, the Court reiterated the low threshold of originality required to invoke copyright protection. By setting a low standard for originality, the Court intended that protection would attach to all compilations, both printed and electronic, except those which contain the most obvious and basic information. Only factual works devoid of even the smallest trace of originality, such as the

197. See *supra* text accompanying note 169.

198. See *supra* text accompanying notes 167-168.

199. 111 S. Ct. 1282 (1991) (Blackmun, J., concurring).

white pages listings at issue in *Feist*, would fail to secure copyright protection under the *Feist* selection theory.

Most importantly, the *Feist* selection theory satisfies the goal of copyright law which seeks to maintain incentives for authors to create factual works while also preserving the public interest in free access to facts and ideas. By exercising original selection in the design of a data base or printed compilation, a compiler earns copyright protection which grants the compiler the right to sell and copy his work in order to make a return on his financial investment. This satisfies the incentive goal and ensures that compilers will continue to produce factual works. At the same time, the selection theory preserves free access to individual facts in copyrightable compilations which satisfies copyright's public dissemination and access goal. This access ensures the continued development of the arts and sciences.

It may seem unfair that much of the fruit of the compiler's labor may be used by others without compensation. . . . [T]his is not "some unforeseen byproduct of a statutory scheme." . . . It is, rather, "the essence of copyright," . . . and a constitutional requirement. The primary objective of copyright is not to reward the labor of authors, but "[t]o promote the Progress of Science and useful Arts."²⁰⁰

200. *Id.* at 1289-90 (citations omitted).

